

### ABSTRACT

A wave energy transducer is provided for converting the kinetic energy of waves moving in a body of water, such as waves in the ocean, to usable power. The wave energy transducer of the invention employs a pair of upright posts anchored to the floor of the ocean in a region subject to heavy wave activity. The posts are aligned perpendicular to the predominant direction of wave action. Mounting arms are hinged to the posts and extend in pairs toward shore and away from shore. Each of the pairs of mounting arms carries a paddlewheel, and the ends of the mounting arms are supported by floats. The floats hold the paddlewheels with their axes of rotation continually above the surface of the water and with their downwardly extending paddlewheel blades dipping into the water. Unidirectional drive mechanisms on each end of the paddlewheel axle are coupled to corresponding drive lines that in turn are connected to a power transducer, such as an electrical generator. Power is thereby extracted both from waves moving toward shore and from waves receding away from shore.